



ReLeaf Tennessee

Sponsored by
Tennessee Dept. of Agriculture, Division of Forestry
University of Tennessee Agricultural Extension Service
Tennessee Forestry Association
Tennessee Urban Forestry Council



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RELEAF TENNESSEE

The following organizations and government agencies contribute valuable time, effort and financial resources to the successful implementation of the ReLeaf Tennessee program.

Tennessee Department of Agriculture, Division of Forestry
(www.tennessee.gov/agriculture/forestry)

University of Tennessee Agricultural Extension Service
(www.utextension.utk.edu)

Tennessee Urban Forestry Council
(www.tufc.com)

Tennessee Forestry Association
(www.tnforestry.com)

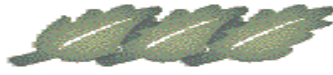
CONTRIBUTORS

The following organizations donated trees or made contributions for trees:

International Paper
Weyerhaeuser Company Foundation
Horticultural Association of Tennessee
The Home Depot
Atticus Trust
Tennessee Valley Authority
Dyersburg Electric System
Knoxville Utilities Board
Memphis Light, Gas & Water
Nashville Electric Service
Clarksville Department of Electricity
Cumberland Electric Membership Corporation
Jackson Energy Authority

Special thanks go to...
Our County Contacts for their work with 4th grade teachers and students in
Tennessee.

Booklet developed on behalf of the Program Sponsors by Ginger Brown, Walnut Tree I&E Services



Dear Teacher:

Welcome to ReLeaf Tennessee, a part of Tennessee's statewide Arbor Day activities. The goal of ReLeaf Tennessee is to provide every 4th grade student with a seedling to plant and watch grow. Arbor Day is a perfect opportunity to teach students, as well as parents, the importance and value of trees. J. Sterling Morton, the founder of Arbor Day, enjoyed this holiday because, "other holidays repose upon the past; Arbor Day proposes for the future." The future of the world depends upon the values taught to our youth. Living in an industrial world as we do, humans create a lot of problems for the environment. Some can be lessened with the planting of trees. According to Dr. Rowan Rowntree of the USDA Forest Service, Urban Forest Ecology Research Project, "a twelve year old child needs to plant and maintain 65 trees in order to offset the amount of carbon that child will put into the atmosphere during the rest of his or her lifetime" (Quoted from Project Learning Tree.)

ReLeaf Tennessee is designed to start teaching students about the importance and benefits of trees. In this booklet, you will find helpful web sites, student activities, information sheets pertaining to Arbor Day and forestry, and classroom activities.

Students in Tennessee will be receiving either Eastern redbud or flowering dogwood tree seedlings as the ReLeaf Tennessee tree for 2004. Included in this year's booklet, you will find information regarding the care and planting of seedlings. **PLEASE READ THIS SECTION CAREFULLY!** It is very important to follow instructions for seedling care and transport. The roots of the seedlings must remain moist. Emphasize this to the children when they take their seedlings home. The seedling's roots must be wrapped in moist paper towels or newspaper to keep the roots from drying out. The seedlings **will not survive** if exposed to air for the bus trip or walk home.

To help meet these requirements, a letter has been provided instructing parents to send a plastic bag and a twist tie to their child's school on the date you specify. (Remember to bring some extras in case some students forget.) Be sure to include the date of the activity on the letter. It also explains to parents how to store and assist with the planting of their child's tree. Please use the letter to increase the chance of survival for these seedlings.

Thank you for participating in ReLeaf Tennessee. Please fill out and return the evaluation form on the back of this booklet. If you have any suggestions or would like to share a lesson plan for next year's booklet, please mail it to: ReLeaf Tennessee Program, Tennessee Department of Agriculture, Division of Forestry, P.O. Box 40627, Melrose Station, Nashville, TN 37204.

Sincerely,

Kay Fermann

Kay Fermann
ReLeaf Tennessee Coordinator
Tennessee Department of Agriculture
Division of Forestry



Dear Parent or Guardian,

Your child will be receiving a flowering dogwood or an Eastern redbud tree seedling for ReLeaf Tennessee on _____ compliments of the Tennessee Department of Agriculture, Division of Forestry, Tennessee Forestry Association, University of Tennessee Agricultural Extension Service, Tennessee Urban Forestry Council and program contributors. On _____, your child needs to bring to school a twist tie and a plastic grocery bag in which to place the seedling for the trip home.

At school, the trees will be wrapped in moist paper towels and placed in a bag to keep the roots of the tree moist. When the tree reaches home, it is important not to let the roots of the tree dry out. Keep the tree in a cool location such as the refrigerator—if it fits—and keep the paper towel around the roots moist. The sooner the tree can be planted, the better.

If you have no place to plant the tree:

- Call the leasing office at your apartment complex and ask permission to plant the seedling on the grounds.
- Call your child's school and get permission to plant the tree there.
- Call the parks and recreation department and ask for permission to plant the tree at a local park.

If you live in an apartment now and are planning to move within the next year or two, your child can plant the tree in a five-gallon pot on the porch and then the tree can be moved with you.

Directions of how to plant the tree properly:

1. Keep the roots of the seedling moist until the tree can be planted. Also, keep the tree in a cool location but not one where it might freeze.
2. Select a location in shade or sunlight that can handle a tree that will reach 20-30 feet tall. Short flowering trees such as the dogwood and redbud can be planted in confined spaces like those near power lines. It is also tolerant of shade and can be planted on the north and east side of a building where full sunlight is at a minimum.
3. Dig a hole that is twice as wide as the root area and no deeper than the roots.
4. Remove the plastic bag and the paper towels from the seedling.
5. Hold the seedling upright as you begin to fill the hole. Pack the soil down firmly but make sure it is not tightly packed.
6. Water the tree thoroughly and slowly so the water has time to soak in.
7. Place mulch in a circular shape around the tree about 2 inches deep and 3 feet in diameter. Make sure the mulch does not touch the trunk of the tree. Mulch around the trunk creates moisture that attracts insects and diseases.
8. Water your tree weekly when there has been no rainfall.
9. ENJOY THE TREE!!!

Sincerely,

Trees donated by: International Paper & Weyerhaeuser Company Foundation & Horticultural Association of Tennessee & The Home Depot & Atticus Trust & Tennessee Valley Authority & Dyersburg Electric System & Knoxville Utilities Board & Memphis Light, Gas and Water & Nashville Electric Service & Clarksville Department of Electricity & Cumberland Electric Membership Corporation & Jackson Energy Authority

Arbor Day

J. Sterling Morton is remembered for an important accomplishment...the establishment of Arbor Day.

Sterling Morton and his wife, Caroline, both lovers of nature, began planting trees soon after they moved to their new home in Nebraska. As a young newspaper journalist, Sterling soon found himself writing articles to encourage community organizations to join with him in the tree planting effort.

Morton's enthusiasm for planting the Nebraska plains with trees grew as the years passed. In 1872, he spoke at the Nebraska State Board of Agriculture meeting. He proposed that a tree planting holiday be established and celebrated in the month of April.

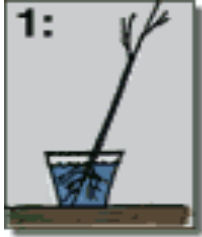
Wide publicity was given to the first Arbor Day in Nebraska with contests and festivities. Over a million trees were planted. It was three years after this first celebration that Sterling Morton was honored when his birthday, April 22, was selected to be the official date for Arbor Day.

The idea of an Arbor Day celebration quickly spread to other states. In 1875, Tennessee became one of the first states outside of Nebraska to recognize this special day. In 1925, the state legislature passed a law that called for statewide observance of "Bird, Flower and Arbor Day" on the first Friday in April. The observation date was changed in 1946 to the first Friday in March. The law calls for educators, civic societies and municipal and county officers to take part in creating "a better understanding of nature and the importance of protecting wildlife, planting and cultivating flowers, and setting and protecting trees."

This year, Tennessee's Arbor Day is March 5, 2004. The date set for observing Arbor Day differs from state to state depending on the climate of the area. The best time to plant trees is during the dormant season -- in the fall after the leaves drop (November 1) to early spring before bud-break (April 1). They have the best chance of survival when weather conditions are cool and plants are able to establish roots in the new location before spring rains and summer heat stimulate new top growth.



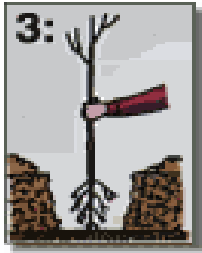
How to Plant a Bare Root Seedling



1 - Take the seedling out of the plastic bag and remove all of the newspaper or paper towels. Determining where to plant a tree is a decision that should not be taken lightly. Many factors should be considered prior to planting. When planning what type of tree to plant, remember to look up and look down to determine where the tree will be located in relation to overhead and underground utility lines.



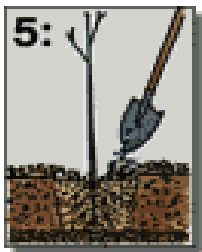
2 - Select an area large enough to handle the tree at maturity. Dig the hole wider than what seems necessary to help the roots of the tree spread out easier, but no deeper than the roots. It is recommended that the grass be removed in the immediate area to reduce competition for water and nutrients.



3 - The tree should be planted at the same depth it was planted at the nursery. Look for the mark left by the soil on the trunk. It is important to make sure all of the roots point down. Begin filling with the soil that came out of the hole. Do not add any other types of soil or fertilizer.



4 - Shovel the remaining soil into the hole. It should be firmly packed but not tightly. Once the hole has been filled in, construct a water basin by mounding soil around the tree several inches away from the trunk. This will direct water toward the roots. Once the tree has been planted, water the tree thoroughly.



5 - After watering the tree, mulch around the tree to help keep lawn mowers and weed eaters away as well as help keep the moisture in the soil. The mulch should be 2 inches deep and in an area 3 feet in diameter. The mulch should be placed in a doughnut- or tire-shape with none of the mulch touching the trunk of the tree.



6 - A seedling tree needs an inch of water a week. During dry times it is important to water your tree at least once a week, sometimes even twice. Always water the tree slowly so the water has time to soak into the soil.

Eastern Redbud

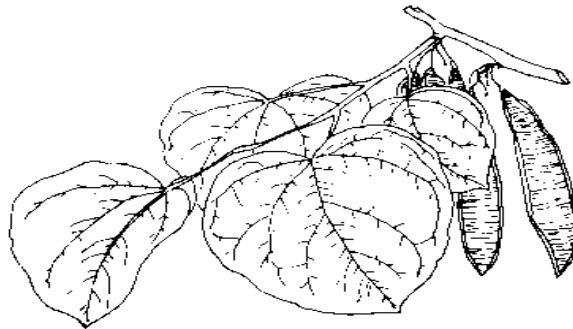
(*Cercis canadensis* L.)

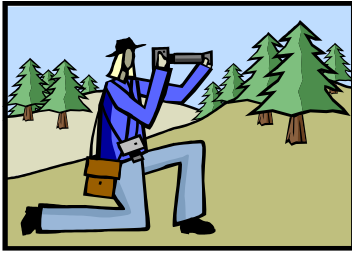
The eastern redbud is a native tree found throughout the South's hardwood forests. Redbud is an understory tree that favors moist soils, either in valleys or on slopes. You have probably seen redbud trees blooming in Tennessee in rural and urban forests and along the highways during March or April.

The wood of the redbud tree has little commercial value. Its value is as an ornamental landscape tree that is sold at nurseries and garden centers. Features that make it a good landscape tree are its short trunk and rounded crown of spreading branches and its showy reddish-pink flowers that bloom in early spring.

Redbud trees are deciduous hardwoods that belong to the Legume Family. They grow in full sun or partial shade. At maturity, they reach an average height of 30 feet with a crown spread of approximately 30 feet. The diameter of the trunk averages 8 inches. The bark of the tree is dark gray or brown and smooth when it is young. It becomes furrowed as it matures. The twigs of redbud have a noticeable zigzag pattern to them. The leaves are heart-shaped and are from 2.5-4.5 inches long and broad. They are dull green above and paler green beneath. In the fall, redbud trees produce flat, brownish seedpods that are 2.5-3.25 inches long. The leaves turn yellow before they drop for the winter. In spring before the leaves reappear, the tree is full of small reddish-pink flowers that grow in clusters of 4 to 8 blooms along the twigs and branches.

When you choose the location to plant your tree, make sure it has plenty of space in which to reach maturity and that it is in a place in which its flowers can be enjoyed in the spring. Redbud trees are suitable for planting near utility lines because they are a small tree and will have little interference with the lines. Although it is best not to plant directly under power lines, this tree can be planted within five to ten feet of them.





(Teacher information to share with the class.)

What is a Forester?

Foresters are college graduates trained to manage natural resources associated with forestlands. Managed forestlands can either be in rural or urban areas. Foresters work for wood-using industries, federal, state and local governments, non-profit organizations and educational institutions. Their jobs include a wide array of tasks and responsibilities that require specialized training and skills.

Industrial foresters work for businesses that make products from trees. Industrial foresters' jobs include managing forestlands for production purposes, buying and selling timber, monitoring environmental quality, and working on research. Examples of forest products research topics are genetic improvement of certain tree species, production of better quality wood, and development of new or improved products from trees.

Government foresters manage government-owned forests, assist private forest landowners, advance scientific knowledge through research, promote good logging practices, educate the public about forestry, assist in the reforestation of our nation's land, assist communities with financial and technical assistance, educate the public about fire management, and many other tasks. Foresters that work for local governments are usually urban foresters that manage the trees within the city limits. Urban foresters plant, maintain, and remove trees along city rights-of-way. They also assist in the protection of trees on construction sites and make sure the right tree is planted in the right spot once construction is complete.

The United States has many non-profit organizations, some of which promote forestry, forest products, and natural resource management. Foresters work for these organizations to educate the public about forestry issues, assist with the implementation of national programs, or even lobby for forestry issues being considered in our state and national legislatures.

At fifty or more of the nation's colleges and universities, forestry professors teach forestry curriculum and do scientific research in the natural resource arena. Foresters also teach the basics of forestry and natural resources at community colleges.

Foresters help protect the environment. They control forest fires, plant trees on eroding lands, and protect the forest from diseases and insects. Foresters improve forestlands. They work to improve tree seedling genetics, manage seedling nurseries, grow trees in our forestlands and cities, and plan hiking trails and other forest recreation uses. Foresters manage forestlands and provide the resources needed to make products from the forest. Foresters teach people about trees and forestry so everyone can participate in good stewardship of our natural resources.

All the Trees in Tennessee Are Part of Its Forest!

(Teacher's Guide)

- I. Activity:** Students may be unaware of the character and benefits of the trees and forests around them. In this activity students are given stories written by four fourth grade students describing the forests around them. Their perspectives of trees and forests vary according to the location and purpose of the trees that are part of their forest. Following the stories, there are fill-in-the-blank statements to test reading comprehension.
1. Ask each student to read the student essays and fill in the blanks in the statements following the stories. (15-20 minutes)
 2. Ask the class to write their own stories that answer the questions in the assignment. Ask them to observe the trees and forests around their home or community and to think about how they would describe them and how they are beneficial. You may want to give them the option of doing the writing assignment as a story, a journal entry, or a letter. (10 minutes classroom time; 30 minutes homework time)
 3. Have students share their stories with the rest of the class. Talk about where their trees or forests are located, what they look like, how they benefit the community now and in the future. (15-20 minutes)
 4. Have students draw pictures of their trees/forests. (10-15 minutes)
- II. Activity:** Students may now be ready to develop their understanding of trees and their uses and to explore the role of foresters.
1. Allow students to use the Internet to go through the interactive programs about trees on the University of Illinois website. Also read *The Forest Where Ashley Lives* on the USDA Forest Service website. See *Want More Tree Stuff?* on page 16-17 of this booklet for the web addresses.
 2. Read *What Is a Forester* on page 9 to the class. Use the following trigger questions to lead a discussion about foresters with the class.
Discussion questions: (10 - 15 minutes)
 - What are some things that foresters do in their jobs?
 - What do urban foresters do? What do industrial foresters do?
 - If you were a forester, what would you like best about being a forester?
 - What would you ask a forester if he or she visited the classroom? Write these down and discuss what possible answers might be.
 3. Invite a forester from your community to give a 15-20 minute talk to the class about his or her career and about how to plant tree seedlings. Prior to his or her visit to your class, let the forester know what you have covered in class and send the list of questions generated from your class discussion. The Area Forester for your county can be found on the Tennessee Department of Agriculture website (see p. 16 in this booklet).
 4. Project Learning Tree activities correlated to the stories in the activity may be found on page 19 of this booklet. For more information about Project Learning Tree see p. 16.

All the Trees in Tennessee Are Part of Its Forest!

All the trees in Tennessee are part of its forest! But trees in different places serve different purposes and benefit people and communities in different ways.

One of the ReLeaf Tennessee activities assigned to fourth graders throughout Tennessee in preparation for celebrating Arbor Day is to observe the trees around them and describe their part of Tennessee's forest.

Instructions for the activity are to look around your house, your neighborhood, or other places you go often. Look at the trees and tell a story. Describe what you see. Consider how many trees there are, what kinds of trees they are, how big they are, and where they are located. Then think about the trees and what they do that is good for you, for your family, and for your community. What important products do they provide? Why were they planted? What is the future of the trees?

Here are some stories that other fourth graders wrote for this assignment.

Jefferson P. Smallwood wrote this description of his part of the Tennessee forest.

There are not many trees in my neighborhood. I live in the middle of a big city. The place near me that looks most like a forest is the park where I play. It is across the street and down a block from my apartment building. My apartment complex has some trees but they are not very big. I counted nine trees growing along the street between there and the park. The park has big trees and little trees. It's hard to tell how many there are but there are a lot, maybe 100. My dad walked there with me and he said some of the trees are a lot older than he is! He and I talked about how the trees are important to us. I said they are important to me because they are so beautiful and because I like to sit in their shade when I'm hot and sweaty after playing on the playground. Dad asked me if I knew that trees in the urban forest help reduce pollution from the noise and auto exhaust in the city. He said they help clean the air. I learned in science class that trees take in carbon dioxide and give off oxygen that we breathe.

I asked Dad why the trees in the park were planted. He said he didn't know for sure but probably so they would be beautiful and provide lots of shade. I said, "That's what I thought!" I asked him about the future of the trees. He said that most of the trees would be around for a lot longer but he pointed out some that looked old and not very healthy. Those might have to be cut down someday. That made me sad but he showed me some seedlings that would grow up to take their place. We had a nice walk home together.



Amy Lee Lerner wrote this about her part of the Tennessee forest.

Before I was born, my forest got planted. Grandpa has told me the story many times about how he planted those trees way before I was born. He planted them on the back part of his farm so that someday his grandchildren could have enough money to go to college.

It takes a lot of time for trees to grow but they are already pretty big. Grandpa says that pine trees grow faster than hardwoods and can go to market after about 20-25 years. He will sell them and the logger will cut them down when we need my college money. They will be used for pulpwood and chipped up and made into paper.

We go for walks through the trees when I visit him and Grandma. I guess I will be sad when they have to be harvested but Grandpa always says, "Well, does it make you sad to see the hay cut? They are both crops. And besides, more will be planted as soon as these are harvested. Maybe that next crop of pines will help your child through college." He calls pine trees and college-educated children long-term investments for our family.



Teresa Marie Gonzales wrote this to describe her part of the Tennessee forest.

As I look around my neighborhood, I see many trees. Most of them are big, old oak and poplar trees. When I ride to school on the bus, I see rolling hills and pastures and forests. I love the colors of leaves in the fall and redbud blossoms in the spring. The forest in Tennessee is different from the forests in Houston where I used to live.

Trees are important to me because they are why my family came to this state. My mom and my dad both work for the utility company. They had lots of experience cleaning up after hurricanes that hit the coast of Texas. When there was a big ice storm in Tennessee, they came to help clear trees from the power lines. They liked it here and got jobs with the county utility company. Mom teaches people about how important it is to plant the right tree in the right place. Dad trims trees that have been planted or have grown by themselves in the wrong place under utility lines. He has shown me some of the funny shapes of trees that have been trimmed. If trees grow too tall and too near the lines, they will fall on the lines if there is a big storm and the power will go off.

Trees are planted for many reasons. I like them because they are pretty. My mom reminds me all the time that the wood from trees provides many things we use everyday like paper and pencils, our house and furniture, and even the cardboard packaging my favorite cookies come in. I guess the future of a tree depends on where it is planted and how it will be used.



Woodrow Allen Hunter, Jr. wrote this about his part of the Tennessee forest.

There are trees everywhere I look. My family lives in a cabin in the mountains. It's a great place to live. Daddy, Momma, my brother and I all like to hike and hunt and fish. There's no way to say how many trees are in the forest. There must be thousands. Some of them are really big and old especially the ones in the coves. All of us put together can't hold hands and reach around some of them, the hemlocks especially.

Trees are important to my family and me because they provide our income. Daddy is a logger and makes his living harvesting trees. Momma works at the state forestry office. Most of our friends and neighbors depend on forests for their living too. People around here mostly agree that we need to cut trees to make forest products. They know its okay because forests are one of our few renewable resources. That means if you cut them down, they can be replaced by planting more or by letting them grow back all by themselves. I want the forests to be around for a long time because I love the beauty of the forest and the time I spend in the woods.



Do you remember some of the things that Jefferson, Amy Lee, Teresa, and Woodrow told you about their forests? Read the sentences below and fill in the blanks.

All the trees in Tennessee are part of its _____!

Jefferson lives in the middle of a big _____. He likes trees because they are _____ and because he likes to sit in their _____ when it's hot. Trees in the urban forest help _____ pollution.

Amy Lee's trees were planted so she can go to _____ someday. Her trees will be sold and cut down, chipped and made into _____. Her grandpa calls pine trees and college-educated children long-term _____ for their family.

Teresa's mom and dad work for the _____ company. Her mom teaches people that it is important to plant the right _____ in the right _____. Trees growing too near utility lines must be _____ so they won't fall on the lines if there is a big storm. Teresa says that the future of a tree depends on where it is _____ and how it will be _____.

Woodrow lives in a cabin in the _____. His dad is a _____. Most of Woodrow's friends and neighbors think it is okay to cut down trees because trees are a _____ resource. Most of his neighbors depend on the _____ to make their living.

Forest Jeopardy

Instructions: Divide the students into teams. Appoint a game master. Display the Forest Jeopardy game board using an overhead projector or flipchart. Allow teams to choose a category and point level of the question they want to answer. The game master asks the team the question assigned to that slot. If one team fails to answer the question correctly, the game master gives the other team or teams the opportunity to answer it correctly and receive the points. The questions and answers are taken from the text of this booklet. This game is also on the Tennessee Department of Agriculture website (see p. 16).

Category 1: Eastern Redbud

- | | | |
|-------|--|---------------------------------|
| 1 pt. | What color do Eastern redbud leaves turn in the fall? | Yellow |
| 2 pt. | To what family does the Eastern redbud tree belong? | Legume |
| 3 pt. | What is the average height of an Eastern redbud at maturity? | 30 ft. |
| 4 pt. | What is the scientific name for Eastern redbud? | <u>Cercis canadensis</u> |
| 5 pt. | How is the Eastern redbud valuable commercially? | As an ornamental tree |

Category 2: Arbor Day

- | | | |
|-------|--|------------------------------|
| 1 pt. | Where was the first Arbor Day held? | Nebraska |
| 2 pt. | How many trees were planted on the first Arbor Day? | Over 1 million |
| 3 pt. | Who was the founder of Arbor Day? | J. Sterling Morton |
| 4 pt. | When does Tennessee celebrate Arbor Day? | First Friday in March |
| 5 pt. | Why does the day set for observing Arbor Day differ from state to state? | Varying climates |

Category 3: Tree Planting

- | | | |
|-------|--|--|
| 1 pt. | When planting a tree, what part of the tree goes into the ground? | Roots |
| 2 pt. | Other than soil, what is the most important thing for the tree seedling to have plenty of? | Water |
| 3 pt. | When determining where to plant a tree, you need to look up and down to look for what? | Utility lines |
| 4 pt. | What time of the year is the best time to plant trees? | Dormant season (Nov. through March) |
| 5 pt. | Why is it advisable to remove the grass in the immediate area of the tree planting site? | To reduce competition for water and nutrients |

Category 4: Forestry and Foresters

- | | | |
|-------|---|--|
| 1 pt. | Where do urban foresters work? | In cities or towns |
| 2 pt. | What kinds of schools offer forestry degrees? | Colleges & universities |
| 3 pt. | Pine trees need to be about how old before they are ready to harvest? | 20-25 yrs. |
| 4 pt. | Why are forests a renewable resource? | When trees are cut others can be grown in their place |
| 5 pt. | If the shade provided by a tree saves \$100 per year on the electricity bill of a nearby house, how much money will that tree save the homeowner over a 25-year period? | \$2,500 |

FOREST JEOPARDY

Eastern Redbud	Arbor Day	Tree Planting	Forestry and Foresters
1 point	1 point	1 point	1 point
2 points	2 points	2 points	2 points
3 points	3 points	3 points	3 points
4 points	4 points	4 points	4 points
5 points	5 points	5 points	5 points

(Above) Cross through each box as it is answered correctly. (Below) List points each team receives during each round in the columns below and then total team points at the end of the game.

Team A	Team B	Team C	Team D
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Want More Tree Stuff?



Tennessee Department of Agriculture, Division of Forestry
www.tennessee.gov/agriculture/forestry

The Division website contains information on Tennessee's forests and forest products, and links to forestry publications. For educational programs, see the sections on Arbor Month and ReLeaf Tennessee. ReLeaf Tennessee booklets for 2002-2004 are found at this site as well.

Behind the Wall of Green is a booklet designed to assist teachers in teaching about trees, the forest today, the history of our forest, and about forest management. It is found in the publications section under More Web-Readable Resources.

Project Learning Tree
www.plt.org

Project Learning Tree is an award-winning environmental education program for pre-K through 12. The curriculum helps students gain awareness and knowledge of the natural and built environment, their place in it as well as their responsibility for it. By attending a free six-hour workshop, teachers can receive a book with over 100 activities that teach children how to think about the environment and not what to think. To find out where the next workshop will be held or to have a workshop hosted at your school, contact the Tennessee Forestry Association at (615) 883-3832 or visit www.tnforestry.com.

National Arbor Day Foundation
www.arborday.org

This site has many activities and resources about Arbor Day, tree planting, and forests and trees in general. The *Celebrate Arbor Day Guidebook* gives ideas on how to observe and celebrate Arbor Day in your community. For a free copy, order online or send a postcard requesting the Celebrate Arbor Day booklet to: The National Arbor Day Foundation, 100 Arbor Avenue, Nebraska City, NE 68410. Be sure to include your name and return address.

See the Youth Education page listed under Programs for fun activities and materials that help students gain more knowledge about forests and trees.

There are also excellent publications available for purchase. *Trees are Terrific* is a kit designed for use in upper elementary classrooms. It includes two instructional units—"Arbor Day - a Celebration of Stewardship" and "Be a Tree Sleuth." *What Tree is That?* is an identification booklet that helps identify many of the popular trees grown in the U.S. Be sure to order the booklet for the eastern region.

Tree Link: the Community Forestry Resource **www.treelink.org**

This site is geared to help individuals who want to gain more knowledge about urban forestry. It has the latest news articles related to urban forestry issues. There is also information about urban forestry programs, non-profit organizations, and local projects in each state. The text of the National Arbor Day Foundation's booklet, *What Tree is That?* and other tree identification guides can also be found on this site. See **Kids Corner** for links to online games, books, activities and quizzes related to trees.

University of Illinois Extension—Urban Programs Resource Network **www.urbanext.uiuc.edu**

Go to the Just for Kids icon and click on it. Several programs for kids are offered. *Trees are Terrific! Travels with Pierre*, offers fun, straightforward information about trees and why they are important to us. Also see *Exploring the Secret Life of Trees* for an audio and visual program that teaches the parts of a tree and their functions. Most of the activities are available in Spanish as well as English and include a teacher's guide.

USDA Forest Service **www.fs.fed.us/spf**

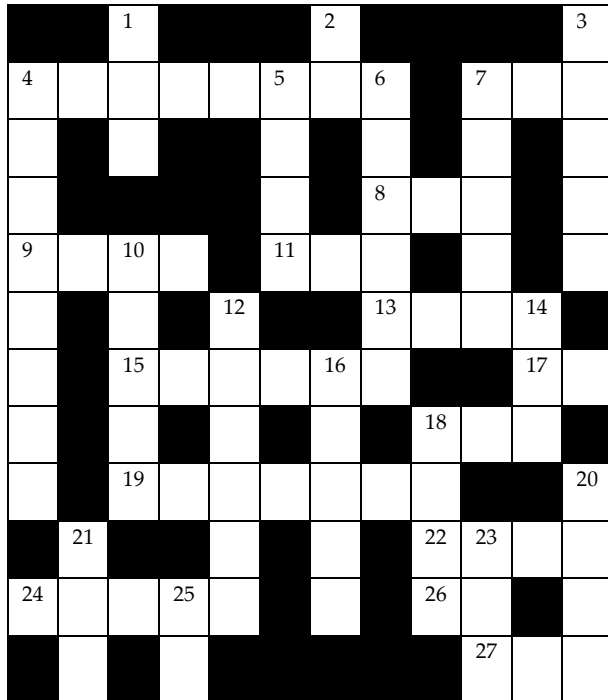
Select State & Private Forestry and then select Conservation Education. Some excellent conservation education activities and resources are on this site. There are links to environmental education sites, including **Woodsy Owl** and **Smokey Bear**, information about Forest Service education programs, and curricular resources. Be sure to take a look at the link to *The Forest Where Ashley Lives* under the heading, For Students. It is an excellent supplement to the activities in this booklet. Also look at *Ecosystem Matters: Activity and Resource Guide for Environmental Education*. It is full of great activities for grades K-12 and the full text is on the web site. There are also links to educational activities and resources for students and teachers.

American Forest & Paper Association **www.afandpa.org**

AF&PA represents forest and wood products companies engaged in growing, harvesting, and processing wood and wood fiber, manufacturing pulp, paper, and paperboard products and producing engineered and traditional wood products. The **Educators and Students** section has activities and information on papermaking, recycling, composting, trees and tree products, and an **Earth Day Groceries Project** in which classrooms borrow grocery bags from a local store, decorate them and give them back to the store to be distributed on Earth Day.

Tree Words Crossword Puzzle

Directions: Write the answers to the clues listed below in the appropriate blocks on the puzzle. You earn one point for each word you fill in correctly. See the PICK BOX for some help.



Down

1. product of a pecan tree
2. I
3. unit of measure just over 3 feet
4. trees need this to make food
5. tree part below ground
6. building material from trees
7. tree that bears a crispy fruit
10. tree that gives us syrup
12. what a seed does when it starts to grow
14. short sleep
16. opposite of dead
18. white stuff that falls from sky
20. what's left in the wood where a branch was attached to the tree trunk
21. what birds can do
23. write with this
25. opposite of yes

Across

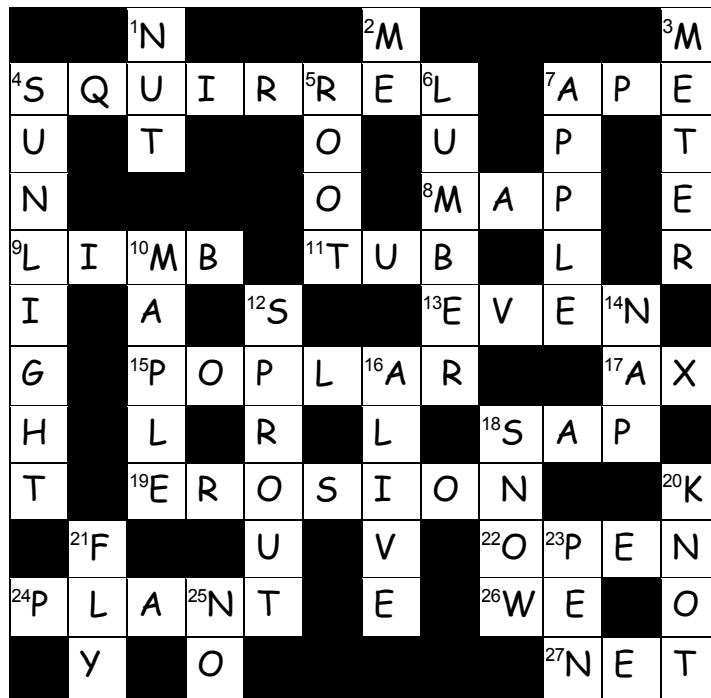
4. chatty animal that lives in trees
7. climbs trees in the tropical rain forest
8. piece of paper that tells you where you are
9. connects tree trunk to the leaves
11. where you take a bath
13. opposite of odd number
15. Tennessee state tree
17. used for chopping wood
18. tree "blood"
19. trees help prevent this from happening to soil
22. opposite of closed
24. a tree is a kind of this
26. us
27. catch fish in it

PICK BOX

ALIVE	APE	APPLE
AX	EROSION	EVEN
FLY	KNOT	LIMB
LUMBER	MAP	MAPLE
ME	METER	NAP
NET	NO	NUT
OPEN	PEN	PLANT
POPLAR	ROOT	SAP
SNOW	SPROUT	
SQUIRREL	SUNLIGHT	
TUB	WE	

10 POINTBONUS!!! Circle the words in the PICK BOX that relate to trees or forests and their products or benefits.

Key to Tree Words Crossword Puzzle:



Project Learning Tree Activities:

The following Project Learning Tree activities can be used in the classroom to reinforce the concepts found in the stories told by the children in *All the Trees in Tennessee Are Part of Its Forest!* (p.11-13) If you are interested in participating in a Project Learning Tree (PLT) teacher workshop, contact the Tennessee Forestry Association at 615-883-3832.

Jefferson P. Smallwood

Activity #47 - Are vacant lots vacant?
 Activity #67 - How big is your tree?
 Activity #89—Trees for many reasons
 Activity #85 - Air to drive

Amy Lee Learner

Activity #27 - Every tree for itself
 Activity #69 - Forest for the trees
 Activity #13 - We all need trees
 Activity #61 - The closer you look

Teresa Marie Gonzales

Activity #64 - Looking at leaves
 Activity #34 - Who works in this forest?
 Activity #12 - Tree treasures
 Activity #13 - We all need trees

Woodrow Allen Hunter

Activity #12 - Tree treasures
 Activity #34 - Who works in this forest?
 Activity #54 - I'd like to visit a place where
 Activity #14 - Renewable or not?
 Activity #80 - Nothing succeeds like succession

2004 RELEAF TENNESSEE EVALUATION FORM

Please share your opinion of the ReLeaf Tennessee Educator's Booklet. **Each teacher that returns a completed evaluation will receive a gift suitable for classroom teaching.**

Teacher name: _____ Email address: _____

School name: _____

School mailing address: _____

_____ Zip: _____ County: _____ No. of students: _____

1. Were the materials provided in the ReLeaf Tennessee booklet beneficial to you and your students?

	YES	NO	COMMENTS:
Teacher letter	<input type="checkbox"/>	<input type="checkbox"/>	_____
Parent letter	<input type="checkbox"/>	<input type="checkbox"/>	_____
Arbor Day	<input type="checkbox"/>	<input type="checkbox"/>	_____
How to Plant a Tree	<input type="checkbox"/>	<input type="checkbox"/>	_____
Eastern Redbud	<input type="checkbox"/>	<input type="checkbox"/>	_____
What is a Forester?	<input type="checkbox"/>	<input type="checkbox"/>	_____
All the Trees in TN...	<input type="checkbox"/>	<input type="checkbox"/>	_____
Forest Jeopardy	<input type="checkbox"/>	<input type="checkbox"/>	_____
Want More Tree Stuff?	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crossword puzzle	<input type="checkbox"/>	<input type="checkbox"/>	_____

2. What would make the ReLeaf Tennessee Educator's Booklet more helpful for you?

3. Please provide additional comments about the ReLeaf Tennessee program:

Please return this form to: ReLeaf Tennessee, Tennessee Department of Agriculture,
Division of Forestry, P.O. Box 40627, Melrose Station, Nashville, TN 37204

THANK YOU!